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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/593,650

09/21/2006

Yoshio Ueda

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466 7590 05/26/2010

YOUNG & THOMPSON
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EXAMINER

NGO, CHUONG A

ART UNIT

PAPER NUMBER

2617

NOTIFICATION DATE

DELIVERY MODE

05/26/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DocketingDept@young-thompson.com

Office Action Summary	Application No. 10/593,650	Applicant(s) UEDA, YOSHIO	
	Examiner CHUONG A. NGO	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 and 19-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 16-18 have been considered but they are not persuasive.

Applicant argues Willenegger fails to disclose "wherein upon constructing the ciphering counter, the ciphering function initializes the HFN on a basis of an initial value included in ciphering parameters issued by the mobile station and sets the initialized HFN in the ciphering counter" as in claim 16, but asserted that Yi [0178] discloses such a feature.

Examiner very kindly directs the applicant to Yi i.e. "wherein upon constructing the ciphering counter, the ciphering function initializes the HFN on a basis of an initial value included in ciphering parameters issued by the mobile station and sets the initialized HFN in the ciphering counter"

(additional to Yi, paragraph [0178], paragraph [0209], where Yi discusses both the user terminal and the UTRAN may re-establish/establish the SRBs (except SRB2) and RBs with a START value which corresponds to an initial value of the HFN....The START value may correspond to a predetermined value (which may, for example, be defined in accordance with the standards developed by the 3GPP) and may be managed by a ciphering module of the terminal). Therefore, with the combination of disclosure from Willenegger and Yi inventions are covering the claim limitation.

Applicant argues Yi does not disclose that "the base station has a ciphering function" and "the cipher function initializes the HFN on a basis of an initial value included in ciphering parameters issued by the mobile station" of the structural requirements of the present invention.

Examiner very kindly directs the applicant to Yi i.e. **(see paragraph [0209], Yi discusses both the user terminal and the UTRAN may re-establish/establish the SRBs (except SRB2) and RBs with a START value which corresponds to an initial value of the HFN, where UTRAN, short for UMTS Terrestrial Radio Access Network, is a collective term for the Node B's and Radio Network Controllers which make up the UMTS radio access network, therefore, base station is included).**

Applicant argues Yi does not disclose that the ciphering function increases the initialized HFN with a period of the SFN.

Examiner very kindly directs the applicant to Yi i.e. "the ciphering function increases the initialized HFN with a period of the SFN" **(also see Yi, paragraph [0101], Yi discusses the long sequence number corresponding to HFN is also synchronized because the CFN is calculated from the SFN (System Frame Number), therefore, the ciphering function increases the initialized HFN with a period of the SFN).** Therefore the rejection is maintained.

2. The examiner has updated the rejection to further clarify and has not changed the interpretation of the rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Public 20030207696 (hereinafter Willenegger) in view of US Patent Application Public 20030157927 (hereinafter Yi).

Regarding claims 16-18, Willenegger discloses “A mobile communication system using HSDPA (High Speed Downlink Packet Access) in which one physical channel is used by a plurality of mobile stations in common in a time division form” (see paragraphs [0023]-[0026], [0138]-[0143] and Fig. 1, where **Willenegger discusses HSDPA and time division**) and “scheduling for executing radio transmission on the physical channel is conducted by a base station” (see paragraphs [0144], [0147]), Willenegger discloses “the base station has coding schemes function of preventing control signals and user information directed to the mobile station from being intercepted illegally in a radio section of a RLC-TM (Radio Link Control Transparent Mode) by using a coding schemes counter (see paragraph [0027]-[0030], where **Willenegger**

discusses the data and messages based on one or more coding schemes to provide coded data),

Willenegger discloses coding schemes function. However, Willenegger does not particularly disclose a ciphering function. In an analogous field of endeavor, Yi teaches “ciphering function” **(see paragraphs [0076], [0077]),**

Yi teaches “wherein the ciphering function constructs the ciphering counter by combining an HFN (Hyper Frame Number) and an SFN (Cell System Frame Number counter)” **(see paragraphs [0088]-[0097], Fig. 9, where Yi discusses detailed structures of the COUNT-C parameter),**

Yi teaches “wherein upon constructing the ciphering counter, the ciphering function initializes the HFN on a basis of an initial value included in ciphering parameters issued by the mobile station and sets the initialized HFN in the ciphering counter” **(see paragraph [0178], where Yi discusses the user terminal will not increment its HFN value as in the previous case; and because the PDU was ciphered based on the same HFN value, the user terminal will be able to decipher it, therefore, the ciphering function initializes the HFN on a basis of an initial value included in ciphering parameters and paragraph [0209], where Yi discusses both the user terminal and the UTRAN may re-establish/establish the SRBs (except SRB2) and RBs with a START value which corresponds to an initial value of the HFN....The START value may correspond to a predetermined value (which**

may, for example, be defined in accordance with the standards developed by the 3GPP) and may be managed by a ciphering module of the terminal),

Yi teaches “wherein the ciphering function increases the initialized HFN with a period of the SFN” **(see paragraph [0101], Yi discusses the long sequence number corresponding to HFN is also synchronized because the CFN is calculated from the SFN (System Frame Number), therefore, the ciphering function increases the initialized HFN with a period of the SFN).**

It would have been obvious to one of ordinary skill in the art at the time of the invention was make to combine Willenegger invention, and have ciphering function, as taught by Yi, thereby, providing method for more efficiently resolve discrepancies, as discussed by Yi, (see paragraphs [0112]).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

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the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG A. NGO whose telephone number is 571-270-7264. The examiner can normally be reached on Monday through Thursday 6:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on 571-272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHUONG A NGO/
Examiner, Art Unit 2617

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/KAMRAN AFSHAR/
Primary Examiner, Art Unit 2617